Agronomic Crops

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Agronomic Crops

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	25%	25%		
205	Plant Management Systems	50%	50%		
215	Biological Control of Pests Affecting Plants	10%	10%		
216	Integrated Pest Management Systems	15%	15%		
	Total	100%	100%		

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2008	Extension		Research	
	1862	1890	1862	1890
Plan	22.9	0.5	0.0	0.0
Actual	22.7	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
407117	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
496222	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
2678810	0	0	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

ETP10B Geospatial Technologies: This ETP included an in-service training session that included the following: planning geospatial education programs, collecting data, navigating, and mapping with a handheld GPS unit, utilizing Virtual Alabama (Google Earth EC), and utilizing publicly available imagery.

ETP10C Sustainable Peanut Production: Participants in this ETP were involved in the following: direct response to indirect and direct in-field advisement of peanut producers; on-farm diagnoses of peanut weed, disease, and plant health inquiries; and attendance/participation in state, regional, or national production conferences.

ETP10D Global Competitiveness in Alabama Agriculture: The Global Competitiveness ETP is responsible for responding to the lack of experience with and international awareness by providing extension educators with exposure to international agriculture in a wide range of areas. The program is made up of 22 regional and county extension agents, 5 specialists, and 4 county extension coordinators.

ETP10E Herbicide Resistance Management Program: This project educated farmers about the threat of herbicide resistant weeds in their row crops and also acted as an early detection system to limit the spread of herbicide resistant weeds in Alabama.The proper use of herbicides, sprayer calibration, and crop rotation benefits were the focus of the project.It provided a method for farmers to report weeds in their fields that they think are resistant to foliar herbicides such as glyphosate (Roundup, etc.).

ETP10F Rapid Response Agronomic Program: Activities were designated in four distinct categories:1) response to direct inquiries involving recommendation requests; 2) on-farm response to direct or indirect subject matter inquiries; 3) response to environmental disasters; and 4) proactive programming to aid in unforeseen problems.

ETP10G Asian Soybean Rust: This season-long monitoring program provided an early warning system for soybean growers in Alabama and the Southeast. The project consisted of team members monitoring soybean sentinel plots located throughout the state.When soybean rust was detected in a sentinel plot, soybean growers were alerted of its presence via the Auburn University Soybean Rust Hotline and the USDA-Soybean Rust Website.

ETP10H Renewable Energy Project: This project was aided at increasing the domestic fuel supply thereby decreasing energy prices and to increase production of energy feed stocks. To reach these goals, ETP members worked with farmers, forestry owners, fleet managers, renewable energy entrepreneurs, state and local governments and other institutions and agencies. Team members used research based crop production data to help improve energy crop production, produce on-line videos, and a website.

ETP10I Irrigation and Water Management:This project allowed agents and specialists to become familiar with operating characteristics and applicability of various irrigation systems for Alabama crops by attending in-service irrigation-related meetings, commodity production meetings, and special workshops held annually.Meeting target audiences include existing and potential row-crop irrigators.

2. Brief description of the target audience

Target audience: The activities of the Agronomic Crops Program Priority Team targeted the following groups of stakeholders: 1) row crop producers and their representative groups that included, but were not limited to, the Alabama Cotton Commission, Alabama Peanut Commission, Alabama Soybean Producers, and the Alabama Wheat and Feed Grains Committee; 2) row crop advisors included ACES agents and specialists, public and private crop advisors; 3) governmental agency personnel included USDA, NRCS, and federal crop insurance and risk managers, 4) public policy makers requesting information that impacted Alabama's agricultural community, and 5) private citizens impacted by policies and practices used for the production of food, fuel, and fiber. All educational programming efforts targeted audiences without exclusion or discrimination, as specifically defined by ACES policy guidelines.

V(E). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons (contacts) reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	**Target**	**Target**	**Target**	**Target**
Plan	56000	210000	4500	16500
2008	0	0	0	0

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year	Target
Plan:	0
2008:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	2	2	0

V(F). State Defined Outputs

Output Target
Output #1

Output Measure

This program area will include numerous output activities and methods as part of the Extension Team Projects (ETPs) which are described/explained in the prior "outcome activities and methods sections." The success of many of these outcomes will be formally evaluated/measured by using individual activity evaluation forms designed specifically for each activity, the success of other activities and methods will be measured by the level of participation in the activity. In the target boxes below for each year, we are indicating the number of individual activities within the ETPs for this program area that will be formally evaluated using an evaluation instrument designed specifically for that activity.

Year	Target	Actual
2008	4	0

Output #2

Output Measure

Several outputs were generated by this project including distribution of state and region-wide information on the occurrence of Asian soybean rust, insect pest management, field crop diseases, and potential herbicide resistance in crops around the state. Alternative control measures were developed to reduce the impact of the problem pests on the current crop. Recommendations for a management plan for agronomic row crops were also developed. Several methods of notification (e-mail, Timely Information Sheets, articles in the popular press, etc.) were used to disseminate information. Meetings, conferences, and trainings throughout the year included resistant weed management, geospatial and precision agriculture information, soil fertility and fertilizer management, and in-season tours and field days that were used to provide local information on the problem. Other methods such as printed articles and web-site information was distributed through e-mail and website publications to inform the farming community. Specific outputs included: 1- In-service training meetings for target audiences and on-farm visits for cotton, soybean, Asian soybean rust, peanuts, field corn, and small grains production; precision agriculture techniques including geospatial technologies, herbicide resistance as well as integrated management of insect pests; 2- Response via phone, e-mail, internet, and on-farm visits at the request of the producer to diagnose and deliver agronomic crop production recommendations; 3- Information posted on the agronomic crops and the national Asian soybean rust website (i.e., www.alabamacrops.com) and through the Auburn University Soybean Rust telephone hotline; 4- Publications like the 2008 IPM Guides and demonstration results reports for use by clientele groups; 5- Hard copy publications for use in production meetings and trainings where deemed appropriate; 6- Establishment of disaster response measures.

Year	Target	Actual
2008	{No Data Entered}	3

V(G). State Defined Outcomes

O No.	Outcome Name
1	For regional or county production meetings: determine producer numbers, acreage represented, overall economic interests represented from the participating farming operations, and predict the economic impact of the information presented (note: this will be based on the following: (acreage represented X average yield/acre X average cotton and program price received X predicted percent yield increase or savings in inputs based on the agent's or specialist's knowledge). Targets below represent millions of dollars.
2	Each ACES employee is required to provide a success story on the program activity which they felt best demonstrates the impacts of their work. These success stories contain the following elements: Why: Explain the reason the program was done, or the situation or problem that the program addressed What: Specifically what was done and how it was done. When: If this was a one-time event, the date it occurred. If it is was a series of events, or an on-going program, when it began. Where: Specific location-- the county or counties involved. Who and how many: The "who" includes both who did the program and who were the clients of the program, as well as how many people were served. So what: This is the part that gives the real meaning to "success". The basic question to be answered in this part is "what difference did this program make". The difference may be measured in terms of dollars, or in changes in habits, lifestyles or attitudes. Whenever possible use numbers to show the effect of the program. If it is not possible to use numbers, provide a qualitative measurement like client comments or another type of testimonial about the program. Since this program area is very broad in scope and contains multiple Extension Team Projects which have different outcomes measures, the impacts for this program area are best measured in the number and quality of the success stories generated by the individuals who work on these projects. Therefore, one very significant outcome measure is the number of success stories generated.

Agronomic Crops
Outcome #1

1. Outcome Measures

Not reporting on this Outcome for this Annual Report

2. Associated Institution Types

3a. Outcome Type:

3b. Quantitative Outcome

Year	Quantitative Target	Actual

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area

V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought,weather extremes,etc.)
Economy
Appropriations changes
Public Policy changes
Government Regulations
Competing Programmatic Challenges
Populations changes (immigration,new cultural groupings,etc.)

Brief Explanation

There were numerous external factors that impacted the planned outcomes of the Agronomic Crops program.The external factors included: increased input costs, falling commodity prices, potential changes in Farm Bill regulations, weakening of the economic environment across the world, continued technology introduction and high fees for adoption, and other increased costs of production.Inclement weather (drought) was a major problem in isolated areas within the state for the third year in a row.Field inspections also indicated an increase in the spread of herbicide resistant pigweed, since high winds generated by such weather systems and moving from the east into Alabama from Georgia likely moved pollen from resistant plants.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

After Only (post program)
Before-After (before and after program)
During (during program)
Comparisons between program participants (individuals,group,organizations) and non-participants

Evaluation Results

Surveys of Alabama farmers regarding their use and adoption of geospatial technologies (ETP 10D) indicated that producers consider Extension to be the primary source of information regarding geospatial technologies and they expect Extension to continue to provide them with information in this area.This ETP trained Extension personnel to effectively deliver geospatial education to Alabama producers and to assist them in the adoption of these technologies.
In 2008, participants in peanut production training (ETP 10C) estimated that 60 percent of the crop was planted in TSWV-resistant (tomato spotted wilt virus) varieties, boosting the overall acreage to almost 98 percent planted in these varieties. This change has increased agricultural income by more than $10 million in the region. Farmers also indicated that pod-blasting provided by Extension personnel enabled them to dig their crops at the proper time for optimum yield and grade. These efforts resulted in a substantial support network for Alabama peanut growers. By changing cultivation practices and selecting better varieties, growers are increased their yields; by improving weed and pest management practices, growers reduced their input costs; and by digging at optimum harvest time, growers received more money for their crops.
On-farm surveys by participants in ETPs 10E and 10F indicated that greatest impact garnered in 2008 was the determination that glyphosate-resistant pigweed has arrived in Alabama fields and that this problem will probably spread across the state.This knowledge helped producers begin to deal with the problem before it caused major economic loss in their fields.

Key Items of Evaluation

The surveys that the Agronomic Crops team conducts may take on many formats.Included in these are: 1) Pre/post testing of producer or Extension personnel (utilized sparingly for formal in-service trainings); 2) Post testing of production conference effectiveness; and 3) On-farm/direct contact surveys which are conducted on an on-going, informal basis. The third format enables the team to better determine the adoption attitudes towards our educational programming efforts.